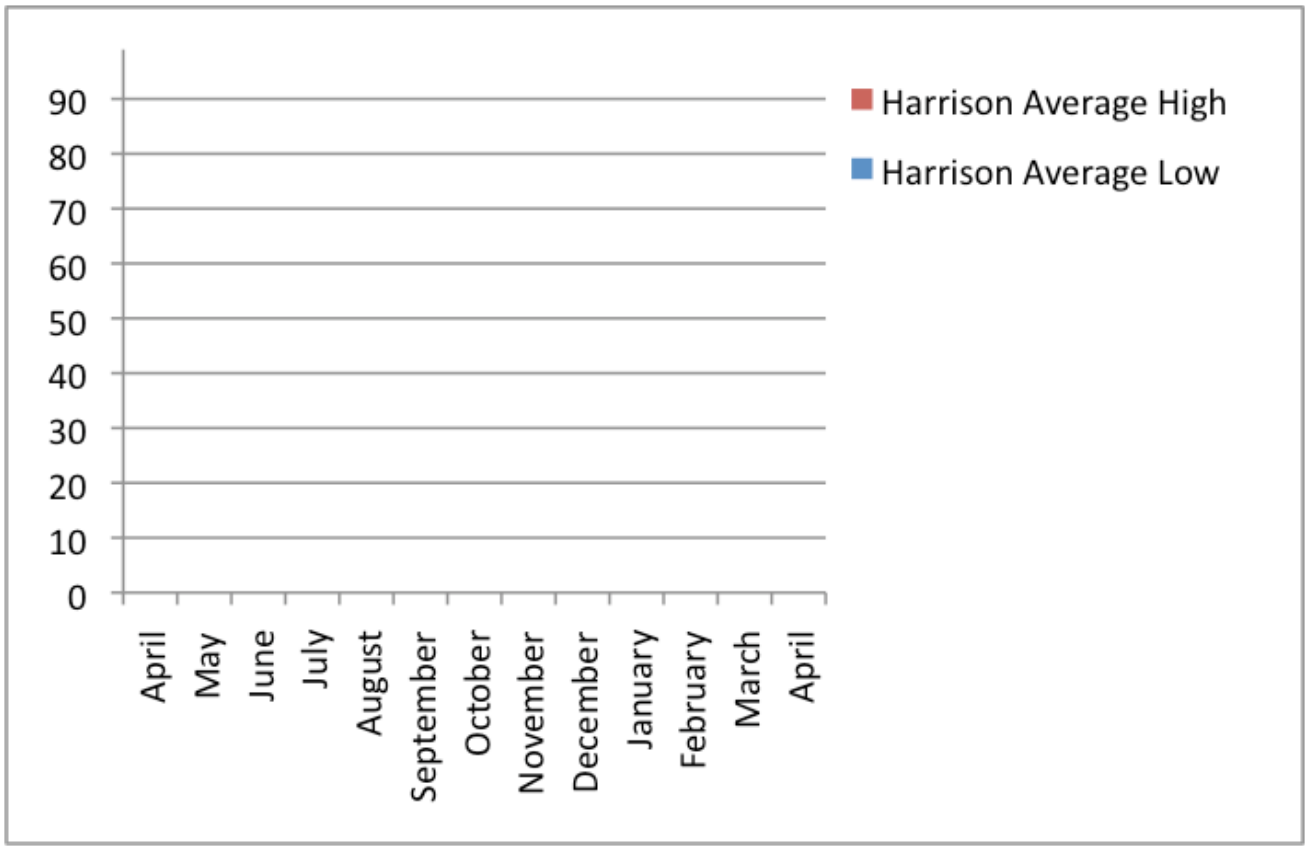
Name: _____ Date: _____

In the graph below sketch the graph of the average monthly high temperatures and then the graph of the average monthly low temperatures. Think about your experiences with seasonal temperature changes and use these to sketch the graphs as best as you can. *Note that the graph starts in April*.



Briefly explain why you drew the graph the way you did:

_____

_____

_____

_____

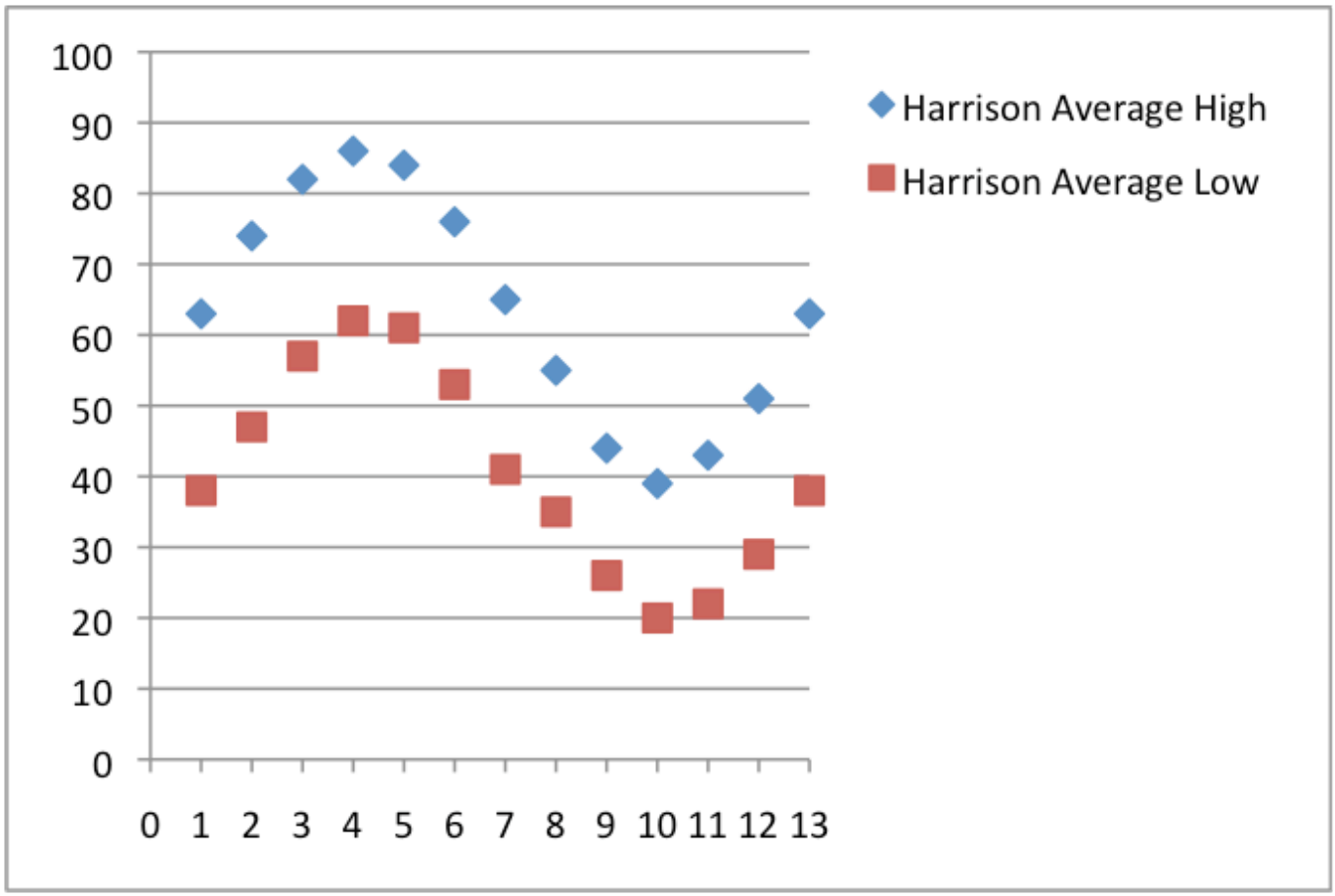
		Harrison, NY	
	Month	Average High (F)	Average Low (F)
1	April	63	38
2	May	74	47
3	June	82	57
4	July	86	62
5	August	84	61
6	September	76	53
7	October	65	41
8	November	55	35
9	December	44	26
10	January	39	20
11	February	43	22
12	March	51	29
13	April	63	38

1.During which months is the average (hi/low) temperature about the same? What symmetries do you see in the graph?

2. Are the graphs of the average low and the average high temperatures the same shape? How can you tell from the graph and how from the data? Between which months does the average temperature change the most/the least?

3. If we would make a graph for five years in a row, what would it look like?

4. When are the maximum and minimum average high and average low temperatures? Where is the middle average temperature? Are the average maximum and minimum equally far from the middle temperature?



(Data obtained from Weather.com)

The Task:

In your groups you will be investigating graphs of other places in the United States and places in other countries. For each set of graphs investigate the following questions:

1. During which months is the average (hi/low) temperature about the same? What symmetries do you see in the graph?

2. Are the graphs of the average low and the average high temperatures the same shape? How can you tell from the graph and how from the data? Between which months does the average temperature change the most/the least?

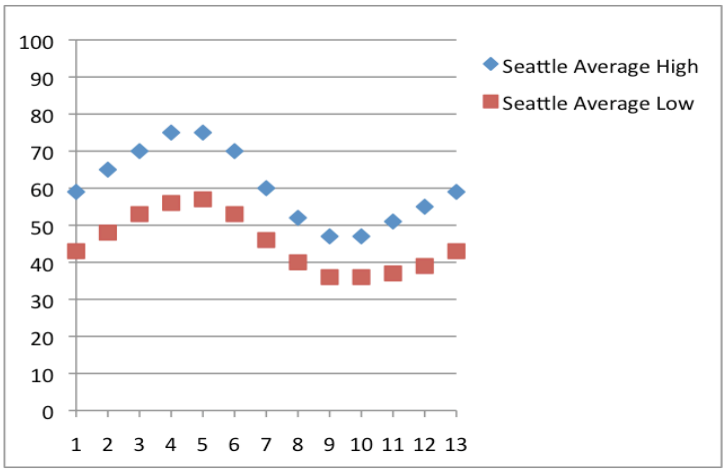
3. When are the maximum and minimum average high and average low temperatures? Where is the middle average temperature? Are the average maximum and minimum equally far from the middle temperature?

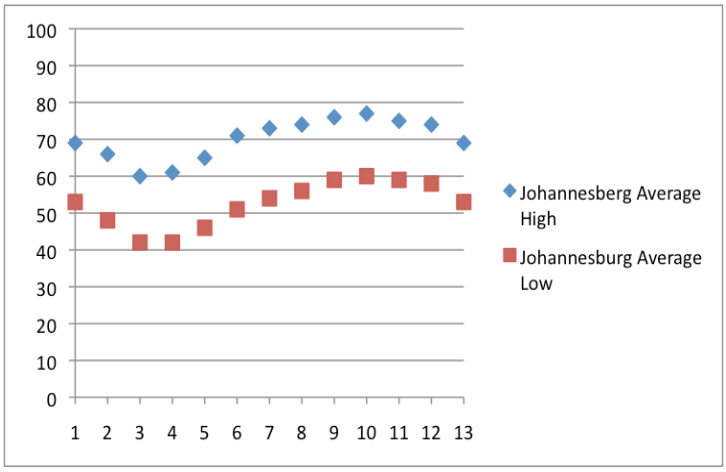
4. Compare each location to Harrison and explain why the graphs are similar of different. You need to consider where the places are located on the earth and think about what kind of climate each of these places has. How can you draw conclusions about climate from these graphs?

One person in the group should keep good notes about your discussions. This person will also be asked to report out to the whole class what you discovered.

A Seattle, Washington versus Johannesburg, South Africa

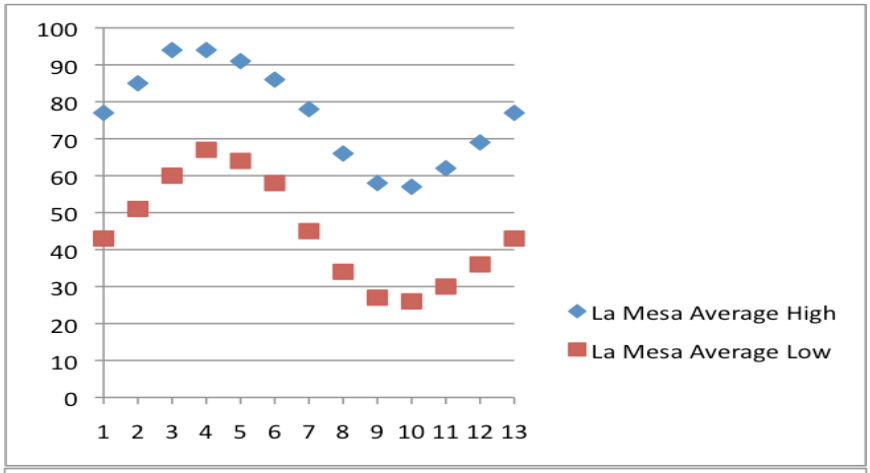
		Seattle, WA		Johannesburg	
	Month	Average High (F)	Average Low (F)	Average High (F)	Average Low (F)
1	April	59	43	69	53
2	May	65	48	66	48
3	June	70	53	60	42
4	July	75	56	61	42
5	August	75	57	65	46
6	September	70	53	71	51
7	October	60	46	73	54
8	November	52	40	74	56
9	December	47	36	76	59
10	January	47	36	77	60
11	February	51	37	75	59
12	March	55	39	74	58
13	April	59	43	69	53

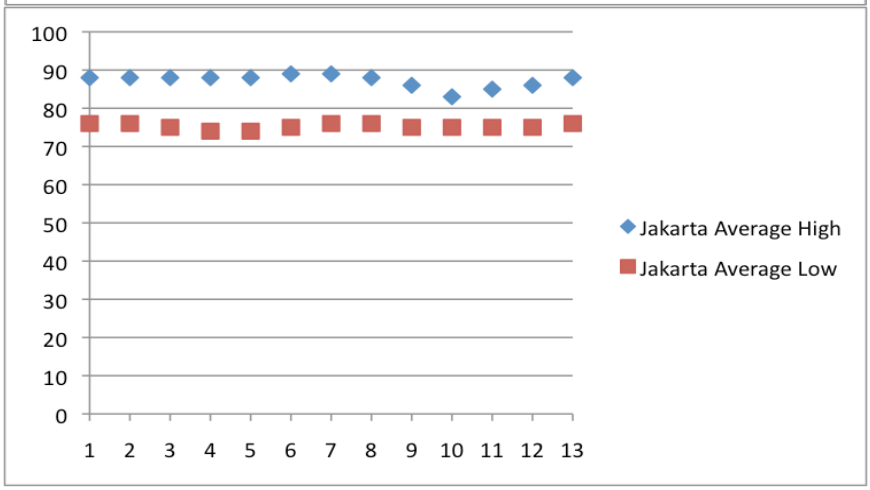




B La Mesa, New Mexico versus Jakarta, Indonesia

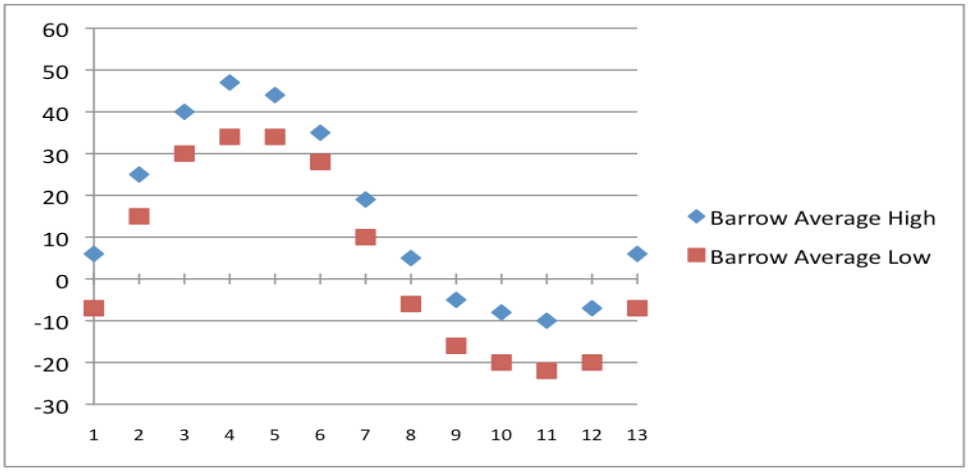
		La Mesa, NM		Jakarta	
	Month	Average High (F)	Average Low (F)	Average High (F)	Average Low (F)
1	April	77	43	88	76
2	May	85	51	88	76
3	June	94	60	88	75
4	July	94	67	88	74
5	August	91	64	88	74
6	September	86	58	89	75
7	October	78	45	89	76
8	November	66	34	88	76
9	December	58	27	86	75
10	January	57	26	83	75
11	February	62	30	85	75
12	March	69	36	86	75
13	April	77	43	88	76

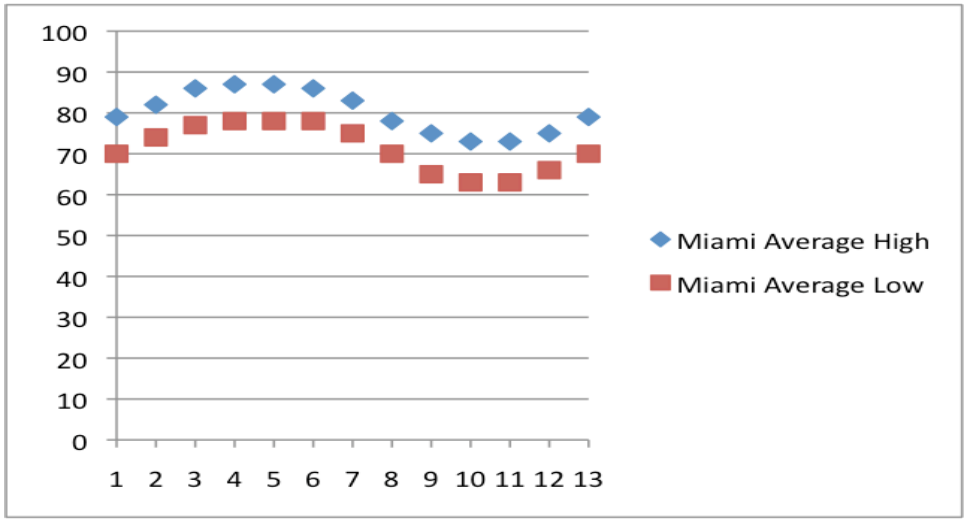




C Barrow, Alaska versus Miami Florida

		Barrow, Alaska		Miami, Florida	
	Month	Average High (F)	Average Low (F)	Average High (F)	Average Low (F)
1	April	6	-7	79	70
2	May	25	15	82	74
3	June	40	30	86	77
4	July	47	34	87	78
5	August	44	34	87	78
6	September	35	28	86	78
7	October	19	10	83	75
8	November	5	-6	78	70
9	December	-5	-16	75	65
10	January	-8	-20	73	63
11	February	-10	-22	73	63
12	March	-7	-20	75	66
13	April	6	-7	79	70





D Reykjavik, Iceland versus Sidney, Australia

		Reykjavik		Sidney	
	Month	Average High (F)	Average Low (F)	Average High (F)	Average Low (F)
1	April	42	33	73	59
2	May	47	39	68	53
3	June	52	44	63	49
4	July	55	47	62	47
5	August	54	46	64	48
6	September	49	41	68	52
7	October	44	36	72	57
8	November	38	31	74	60
9	December	36	28	77	64
10	January	35	27	78	66
11	February	37	29	79	66
12	March	37	29	77	64
13	April	41	33	73	59